KIST + ESCHERICH

ESUC 1300

Filter, suction and supply unit (Performance class 1300 m³/h)

Key Facts

- ✓ **Output air suction and filtering**
- ✓ **Control of cleaning equipment**
- ✓ **Power supply for ionisation**
- ✓ **Compressed air preparation and control**
- ✓ **Monitoring and signal output**

Product Description

The ESUC 1300 is designed as a Performance class 2 solution and optimises the operation of KIST + ESCHERICH surface cleaning devices. Its most convincing feature is a variable filter system that can be implemented in one or multiple stages depending on the requirements – optionally with bag or compact filters. This ensures that output air with small to medium particle loads is efficiently filtered and either emitted into the environment or discharged via an external output air system.

The focus of the ESUC 1300 is on an intelligent control system that continuously monitors not only the cleaning devices, but also all internal components such as the suction fan and the HV power supply. Individually adjustable parameters, including those for compressed air supply and suction power, ensure optimum cleaning results at all times. Remote devices, such as ionisers or flow monitors, are also integrated into the monitoring concept. The automatic error display and signal lamps ensure a prompt alarm in the event of an error. In addition, the system enables an easy connection to existing machine controls – with the option to complete it with a PLC control and bus connection.

- Central operating unit with status and error display
- Full filter prompt and collective error signal on the device
- Monitoring of filters and connected or integrated components and single error message to the remote control
- Actuation via remote machine control is possible
- 4 castors (2 lockable swivel castors) or height-adjustable levelling feet
- Colour RAL 7035 light grey / RAL 5003 sapphire blue (special colour on request)
- Additional variants available: CR, ESD

Suction / filtration

- Compact or bag filters for light and medium particle volumes
- Single- or two-stage design
- Easy filter change
- Universal suction port arrangement on the rear for connecting several cleaning stations

Technical Data

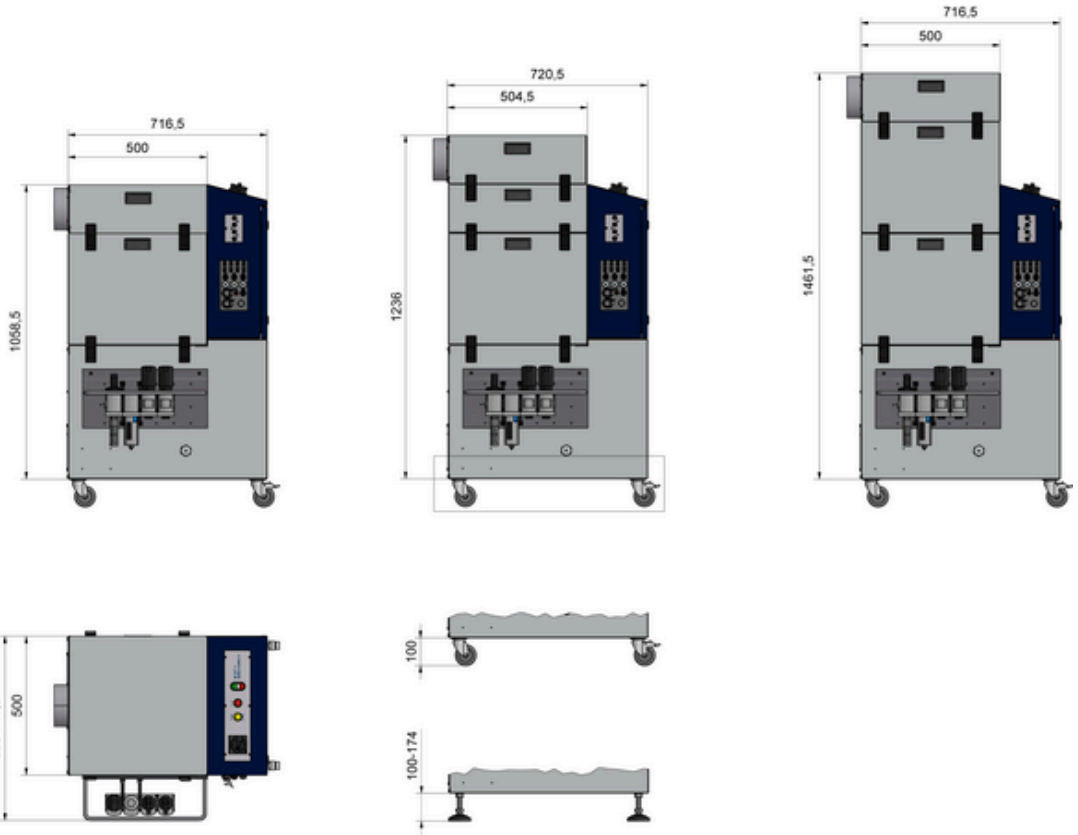
	ESUC 1300	ESUC 1300 CR	ESUC 1300 ESD
Variants	Standard	Cleanroom optimised	ESD applications
Volume flow (max.)	1260 m^3/h	1260 m^3/h	1260 m^3/h
Number of possible filter stages	1, 2	1, 2, police filter	1, 2
Operating voltage	3x 400 V, PE, N	3x 400 V, PE, N	3x 400 V, PE, N
Frequency	50 Hz	50 Hz	50 Hz
Rated power	1.8–2.9 kVA	1.8–2.9 kVA	1.8–2.9 kVA
Rated current (max.)	2.7-6.6 A	2.7-6.6 A	2.7-6.6 A
Pre-fuse	16 A	16 A	16 A
Diameter of the suction port	1x DN150	1x DN150	1x DN150
	1x DN110	1x DN110	1x DN110
Diameter of the output air port	1x DN150 or diffused	1x DN150 or diffused via police filter box	1x DN150 or diffused
		or DN150 via police filter box	
Pressure difference (max.)	2380 Pa	2380 Pa	2380 Pa
Compressed Air Quality	factory, oil-free, dry	factory, oil-free, dry	factory, oil-free, dry
Operating air pressure input	max. 8 bar	max. 8 bar	max. 8 bar
Ambient temperature (min. – max.)	5 – 40 °C	5 – 40 °C	5 – 40 °C
Weight	120–175 kg	120–175 kg	120–175 kg
Degree of protection for control cabinet	IP54	IP54	IP54

Notes:

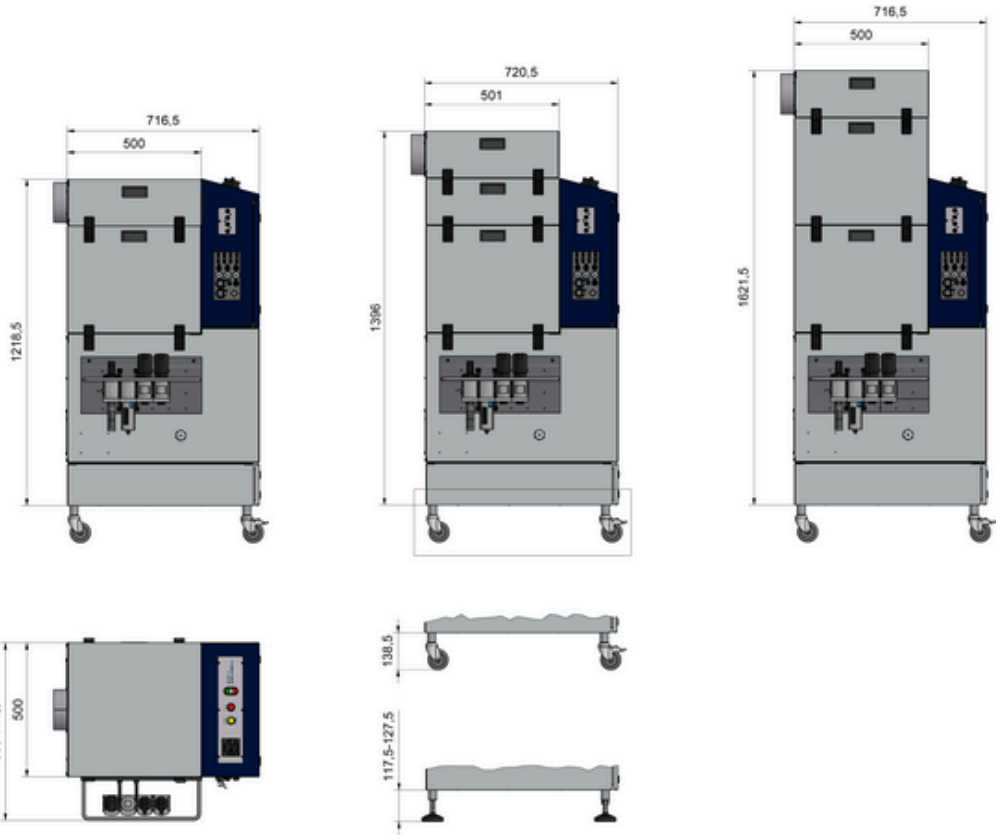
- The maximum volume flow rate and maximum pressure difference are the fan characteristic values in suction mode, free-blowing.
- The rated power and rated current as well as the weight vary depending on the equipment.
- The stated weight refers to a variant without added options.

Technical Drawings

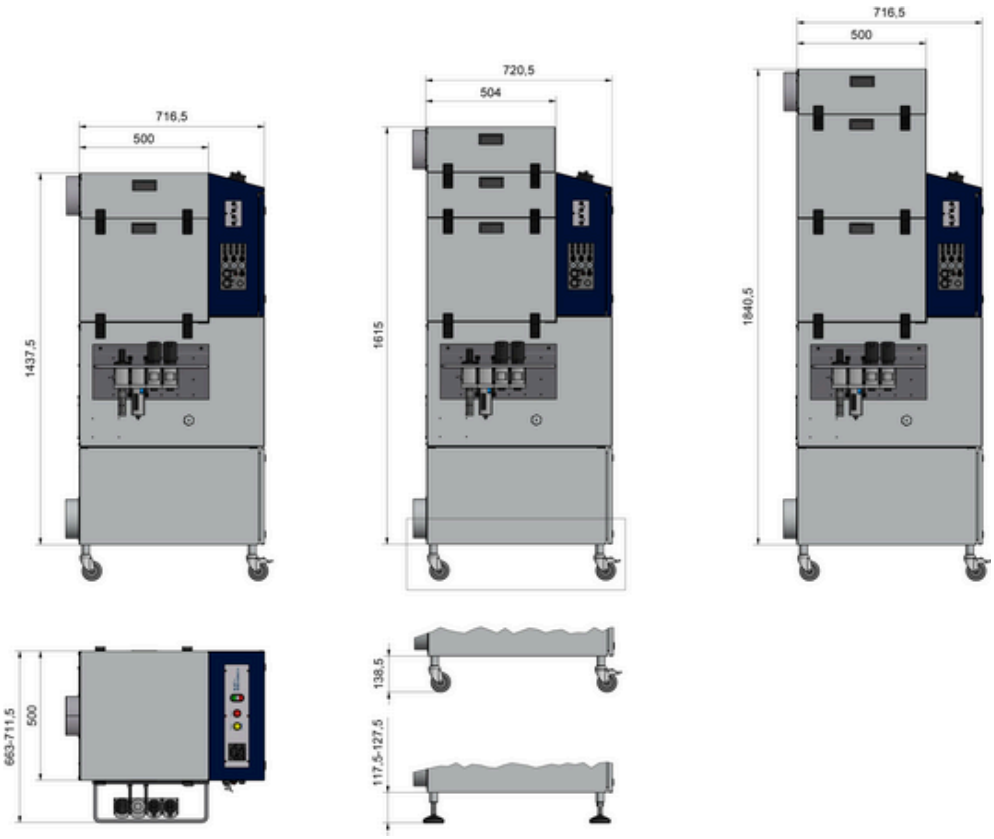
ESUC 1300 with wheels



ESUC 1300 with small police filter box and wheels



ESUC 1300 with big police filter box and wheels



Options

- Compressed Air Preparation and Control
- HV power supply and monitoring for AC ionisation systems
- Power supply and monitoring for DC or ESD ionisation systems
- Control of switched cleaning
- Control and monitoring of cleaning systems with movement
- Control of ROTORCLEAN cleaning systems
- Settings of the suction strength (rev speed setting) of the fan
- Extended monitoring of system parameters (operating pressure, volume flow, rev speed of rotating nozzles)
- Connection to external systems via Profibus/Profinet
- Cleanroom design for contamination-free filter changes
- Output air via output air port or diffused downwards into the work environment
- Additions for cleanroom design variant: Output air is diffused downwards via a police filter into the work environment or through an output air port via police filter
- Touch panel for setting system parameters and individual error messages on the suction device directly

Related Products

Accessories filter

Accessories for output air components

Accessories for suction hoses

ALM

Volume flow monitoring in the suction line

ALBY

Bypass to divert airflow for reduced turbulence

AL2V

2-way distributor for controlling the alternating operation of two cleaning devices on one suction device